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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/942,082

08/29/2001

Gregory L. Norden

7784-000203

6170

27572

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09/08/2008

HARNESS, DICKEY & PIERCE, P.L.C.

P.O. BOX 828

BLOOMFIELD HILLS, MI 48303

EXAMINER

OSBORNE, LUKE R

ART UNIT

PAPER NUMBER

2123

MAIL DATE

DELIVERY MODE

09/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/942,082

**Applicant(s)**

NORDEN ET AL.

**Examiner**

LUKE OSBORNE

**Art Unit**

2123

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 4-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Status*

1. Claims 1, 2, and 4-33 have been presented for reconsideration.

Claims 1, 2, and 4-33 are rejected.

Applicants' arguments submitted 6/17/08 have been fully considered, Examiners response is as follows.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 11-17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,103,498 to Lanier et al. hereinafter "Lanier".

Regarding claim 1 Lanier discloses a computer-implemented method for servicing a mobile platform, the method comprising:

providing a knowledge base of reusable solutions for the mobile platform [Lanier: a knowledge base 330 for storing data 331 along with a help information database 335 used to determine the best help to give (Column 2, line 66 – Column 3, line 10)];

storing the knowledge base in a computer-based medium, the computer-based

medium being accessible to a plurality of users over a user interface [Lanier: In the preferred embodiment, help system 204 is implemented in the Tandy DeskMate environment 203 which provides a software interface 205 between a user 206, a computer application 202, and an operating system 201 (Column 2, lines 42-55), Figure 2];

receiving an incoming message from at least one specific user of the plurality of users from the user interface, where the incoming message characterizes a mobile platform technical issue relating to the mobile platform [Lanier: Figure 3b, item 353, if user requests help];

importing a first set of mobile platform related data from the incoming message into one or more search roles of an inquiry [Lanier: A query is made to knowledge base 330 to attain information through a Query command (Column 7, lines 56-65)];

generating an outgoing message in accordance with one or more of the reusable solutions in the knowledge base in response to the incoming message such that the outgoing message addresses the mobile platform technical issue [Lanier: Figure 3b, items 255-357]; and

sending said outgoing message to the at least one specific user from the computer-based medium [Lanier: Figure 3b, item 358 Assert conclusion and display help].

Regarding claim 2 Lanier discloses the method of claim 1 further including:

locating a relevant reusable solution in accordance with the inquiry; and

exporting data from one or more solution roles of the relevant reusable solution into a second set of mobile platform related data in the outgoing message

[Lanier: The outputs of knowledge base 330 are data 331 and rules 334 which inference engine 340 selects for examination and help information text 336 which display engine 350 processes. Rules 334 are predefined by application developer. The frames indicate the relationship between the user's activity and the associated heuristics used to interpret that activity, thus making it easier to access only the information needed.(Column 10, lines 18-30)].

Regarding claim 11 Lanier discloses the method of claim 2 further including importing a portion of the first set of mobile platform related data into a goal field of the inquiry such that the goal field defines a goal of the technical issue [Lanier: In step 1002, depending on the system state, a group of rules (goal) is selected from knowledge base 330 and used as an hypothesis (Column 10, lines 39-62)].

Regarding claim 12 Lanier discloses the method of claim 2 further including importing a portion of the first set of mobile platform related data into a fact field of the inquiry such that the fact field defines a fact of the technical issue [Lanier: The inputs to knowledge base 330 are the data collected b monitoring device 320 (Column 10, lines 18-30)].

Regarding claim 13 Lanier discloses the method of claim 2 further including importing a portion of the first set of mobile platform related data into a symptom field of the inquiry such that the symptom field defines a symptom of the mobile platform

technical issue [Lanier: The inputs to knowledge base 330 are the data collected b monitoring device 320 (Column 10, lines 18-30)].

Regarding claim 14 Lanier discloses the method of claim 2 further including importing a portion of the first set of mobile platform related data into a change field of the inquiry such that the change field defines a change of the mobile platform technical issue [Lanier: The inputs to knowledge base 330 are the data collected b monitoring device 320 (Column 10, lines 18-30)].

Regarding claim 15 Lanier discloses the method of claim 2 further including exporting data from a cause field into the second set of mobile platform related data such that the second set of mobile platform related data defines a cause of the mobile platform technical issue [Lanier: The inputs to knowledge base 330 are the data collected b monitoring device 320 (Column 10, lines 18-30)].

Regarding claim 16 Lanier discloses the method of claim 2 further including exporting data from a fix field into the second set of mobile platform related data such that the second set of mobile platform related data defines a fix of the mobile platform technical issue [Lanier: The inputs to knowledge base 330 are the data collected b monitoring device 320 (Column 10, lines 18-30)].

Regarding claim 17 Lanier discloses the method of claim 1 further including maintaining the knowledge base for a plurality of mobile platforms [Figure 2, item 202 Application programs, Figure 3A, item 330 Knowledge Base].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 4-10, 19-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,103,498 to Lanier et al. hereinafter "Lanier" in view of "Role – Based Access Control Models" by Ravi S. Sandhu et al., 1996 hereinafter "Sandhu".

Claims 4-10 refer to the security validation and authoring access to the knowledge system by authorized individuals.

Lenier does not expressly teach that the creators of the rules [Lanier: Rules 334 are predefined by application developer (Column 10 lines 18-30)] are authorized updaters of the knowledge base, including a service engineer, subject matter expert, field service representative, and a representative of an operator enterprise...

Claim 4, service engineer.

Claim 5, subject matter expert.

Claim 6, field service representative.

Claim 7, representative of an operator enterprise.

Claim 8, approval status limited to a predefined group of individuals.

Claim 9, service engineers of a manufacture of the mobile platform.

Claim 10, subject matter experts of the manufacturer of the mobile platform.

Sandhu teaches a role based access control model. The different levels of access and security are grouped into the roles of the individuals and groups.

[Sandhu: Roles define both the specific individuals allowed to access resources and the extent to which resources are accessed. For example, an operator role might access all computer resources but not change access permissions; a security-officer role might change permissions but have no access to resources; and an auditor role might access only audit trails. (Page 38, 4<sup>th</sup> paragraph)]

It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the role based access of Sandhu with the mobile platform solution database of the combination of Lanier. The combination would verify the



individuals at central engineering, or the manufacturer as the case may be as the experts to provide new solutions in the database.

The motivation for doing so is found in Sandhu on pages 38-40. In sections labeled needs addressed by roles, and reasons to use RBAC. As found in these sections it makes it easier and more effective for the security system to establish who is and who is not able to access the database and in what method of access the particular individual is granted.

5. Regarding claim 19 Lanier teaches computer-implemented method for updating a mobile platform specific knowledge base, the method comprising:

storing the knowledge base in a computer-based medium, the computer-based medium being accessible to a plurality of users by a user interface [Lanier: a knowledge base 330 for storing data 331 along with a help information database 335 used to determine the best help to give (Column 2, line 66 – Column 3, line 10)];

receiving a mobile platform technical issue from at least one of the plurality of users from the user interface [Lanier: Figure 3b, item 353, if user requests help];

determining whether any reusable solutions of the knowledge base addresses a mobile platform technical issue regarding said mobile platform [Lanier: Figure 3b, items 255-357];

Lanier does not expressly teach the role based access control,

verifying whether an individual has authoring access to the knowledge base;

receiving authoring input from the individual when none of the reusable solutions addresses the mobile platform technical issue;

generating a new reusable solution based on the authoring input when the individual has authoring access; and

implementing the new reusable solution into the knowledge base.

However Lanier does teach that data should be maintained in the knowledge base [Lanier: storing a knowledge base for maintaining data (claim 14)]

Sandhu teaches a role based access control model. The different levels of access and security are grouped into the roles of the individuals and groups.

[Sandhu: Roles define both the specific individuals allowed to access resources and the extent to which resources are accessed. For example, an operator role might access all computer resources but not change access permissions; a security-officer role might change permissions but have no access to resources; and an auditor role might access only audit trails. (Page 38, 4th paragraph)]

It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the mobile platform solution database of the combination of Kleinschnitz in view of Yeh with the role based access of Sandhu. The combination would verify the individuals at central engineering, or the manufacturer as the case may be as the experts to provide new solutions in the database.

The motivation for doing so is found in Sandhu on pages 38-40. In sections labeled needs addressed by roles, and reasons to use RBAC. As found in these

sections it makes it easier and more effective for the security system to establish who is and who is not able to access the database and in what method of access the particular individual is granted.

Claims 20-26 contain similar limitations as claims 4-10, thus are rejected for the same reasons.

Claims 27-31 contain similar limitations as claims 19, 11-14, thus are rejected for the same reasons.

Claims 32-33 contain similar limitations as claim 19, thus is rejected for the same reasons.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lanier in as applied to claim 17 above, and further in view of duplication of parts.

Claim 18 is considered to be mere duplication of parts and rendered obvious from the rejection regarding claim 17. The recitation of providing reusable solutions for more than two million parts of the plurality of mobile platforms is mere duplication of parts over providing an undisclosed amount of supported hardware in Lanier. Examiner states that Applicant has not shown any patentable significance in this apparent scale in size unless Applicant shows a new and unexpected result is produced from the claim as recited.

### ***Response to Arguments***

#### **Applicants Argue**

In particular, Lanier does not teach, suggest or disclose importing a first set of mobile platform related data from the incoming message into one or more search roles of an inquiry, storing the knowledge base in a computer-based medium, the computer-based medium being accessible to a plurality of users over a user interface, or receiving an incoming message from at least one specific user of the plurality of users from the user interface, where the incoming message characterizes a mobile platform technical issue relating to the mobile platform.

#### **Examiners Response**

The Examiner has considered Applicants arguments and found them unpersuasive. In regard to the "mobile platform related data" Applicants have specifically amended to this limitation from a more specific limitation of "aircraft". Mobile platform related data's broadest reasonable interpretation as used for the rejection made includes the computer as the "mobile platform".

Applicants arguments directed to the help system not being accessible by a plurality of users from a user interface, that rather it is accessible by the sole user of that computer that has the software installed on it is unpersuasive. Rather as found in Figure 2, the user 206 interfaces with user interface 205 to get to the help system 204. This help system is available to any user(s) of the computer 203.

The help request generated by a specific user, is about the computer which as already been established as the mobile platform. The Examiner has shown that the reference relied upon discloses the limitations as argued by Applicants and is therefore maintained.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **LUKE OSBORNE** whose telephone number is (571)272-4027. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Luke Osborne/  
Examiner, Art Unit 2123

/Paul L Rodriguez/  
Supervisory Patent Examiner,  
Art Unit 2123